

THE MEDIATING ROLE OF FINANCIAL INCLUSION IN THE RELATIONSHIP BETWEEN FINANCIAL LITERACY AND INDIVIDUALS BEHAVIOR OF SAVINGS AND BORROWING - AN EXPLORATORY STUDY FOR A SAMPLE OF IRAQI BANKS

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Abstract

Aim of research tests the effect increasing the awareness of the members of society financially on their savings and borrowing behavior, and determines the role of financial inclusion that can be exercised by banks in enhancing this effect as an intermediary variable, so used questionnaire as a tool for data collection and distribute more 170 of which were accepted, and employment a number of statistical tools were used to analyze the answers of the research sample and test its hypotheses. Therefore, the researcher recommended the need for banks to intensively strengthen efforts to raise awareness of individuals and ensure their better access to the services they provide to ensure the promotion of positive behavior of the customer.

Keywords: financial inclusion, financial literacy, saving behavior, borrowing behaviour.

Introduction

Enhancing the savings and borrowing behavior of individuals is of great importance in moving the economic wheel. The goal is to employ the financial surpluses of individuals through banks, allowing for the provision of facilities. As a result, this will be reflected in the rise in demand for commodities, increase of production, and rise of GDP. Achieving this result depends on the extent to which individuals in society have awareness and access to financial services, as educated individuals better understand the advantages of financial services (Grohmann & Menkhoff, 2020:45). It is not sufficient unless financial literacy goes hand in hand with it (Ramakrishnan, 2012:313). Most members of society, especially those far from cities, lack a correct understanding of the various financial services and know only a limited number of banking services and activities. In most cases, they believe that the activities of banks are limited to Deposits and withdrawals, and this may be due to the failure of financial institutions to make arrangements or any clear training programs to stimulate access to financial opportunities (Hasan et al., 2021:25), so financial education and financial literacy help

consumers learn about the benefits of financial products, help them to make informed decisions about them, and improve their financial position (Bonging et al., 2015:11), in general, the financial behavior of individuals depends mainly on the extent to which they realize the feasibility of obtaining financial services as well as which extent the skill and ability to use them thoughtfully and correctly to achieve the greatest benefit, in the sense of the extent to which the money can be directed towards maximizing wealth and reducing the possibility of default, or the possibility of meeting these basic needs (such as buying a home) for them, for example (Hilgert et al., 2003:320). Most members of Iraqi society suffer from difficulty in dealing with private financial resources or services that granted by banks to benefit from the opportunities they provide and accustom them to achieving additional income maximizes their wealth. The problem lies in the lack of sufficient vision or awareness among the members of society towards how to save and the purpose of borrowing, and this role may be enhanced by the lack of availability of services or the difficulty of accessing a wide segment of customers to them, so the researcher tries to answer a basic question that summarizes the research problem: **The extent of the impact of financial literacy on the savings and borrowing behavior of individuals in the presence of financial inclusion as a mediator**, so researcher determining the level of awareness of bank customers regarding the use of borrowed financial resources, and the aspects in which they will employ these funds, and test the extent to which banking literacy affects the nature of money use by bank customers, beside studying the possibility of adopting curricula that enhance financial literacy efforts in Iraqi society, standing on the role played by Iraqi banks in tracking the nature of the optimal use of loans.

2.Literary review

1.2. Financial literacy: The concept of literacy is one of the relatively recent concepts, and it is represented by the ability to make informed judgments and make effective decisions regarding the use and management of capital (Marcolin & Abraham, 2006,2). The concept was used for the first time by the Personal Financial Literacy Elimination Coalition (JumpStart) in its introductory introduction was in 1997, describing it as the ability of individuals to use knowledge and skills to manage their financial resources effectively to ensure their financial security for life (Hastings et al., 2012,5) and then expand the scope of the concept, reading and analyzing common financial conditions specific in a way that allows distinguishing financial choices, planning for the future, responding effectively to the events of daily life and the general economy (Yoong, 2011:66),the (OECD) Paying attention to the concept of literacy has become one of the priorities of decision makers to realize its importance in enabling individuals to control their increasingly complex financial conditions and to make the best use of investing in innovations and new financial products, and thus to carry out proper financial planning that increases the chances of achieving their goals in order to reach better living standards (Hall, 2008:12), individuals who possess more financial knowledge are more able to control their spending patterns and their own decisions and develop their savings and investment habits (Chen & Volpe, 1998:75), and choose investment portfolio tools (Yong, 2011:56), in contrast Individuals who lack financial skills will face difficulty in accessing financing alternatives and determining their financial options, as they are less knowledgeable about broad financial tools and services, which leads to their poor choice, and as a result it is reflected in the markets with

a decrease in their growth rates to focus dealing on a limited number of financial instruments and investors Sharma, 2018: 9)) Therefore, reducing financial illiteracy levels will create an increased demand for financial services provided and narrow the financial exclusion gap (Khalid, 2012: 5), which is the lack of financial knowledge and one of the most important basic reasons for it, Cole et al., 2011: 114) and enhance financial training with the aim of As one of the effective methods in raising the psychological barriers that hinder entry to the financial markets and increase confidence and belief in the financial markets (Bayrakdaroglu & San, 2014: 155). the following dimensions of financial literacy can be diagnosed (Zait & Bertea ,2013:93):

1.2.1 Financial Knowledge: Financial knowledge of financial concepts and products based on a set of skills and knowledge that allows the individual to make informed and effective decisions with all his financial resources. Thus, attention is focused on personal financing, which is the focus of government programs.

1.2.2 Financial behavior: the real use of various financial tools through which the overall effects of financial decisions on individual circumstances (any person, family, society or country) are adjusted and correct decisions related to cash management, reserves and budget planning opportunities are taken.

1.2.3 Financial position: Knowledge of financial matters and the ability to make sound financial decisions. In the banking field, it refers to the ability to service a loan, known as financial ability.

2.2. Financial inclusion: Individuals in different countries suffer from difficulty in accessing banking services, as they are potential customers and their deprivation of these services affects their performance. 2013:45,Gatnar), financial inclusion is a state in which different individuals, regardless of their location, can access a full range of high-quality financial services at reasonable prices, in an appropriate manner, and with dignity (Hameedu, 2013:188), in the sense of adopting a strategy that enables willing and unwilling individuals, companies, and projects In obtaining financial and banking services by accessing them in a way that meets their needs according to the principle of efficiency, quality, and use, and in a continuous manner that ensures the achievement of the goals of inclusion (Bhowmik Saha, 3, 2013). It is clear from the foregoing that providing access to the largest number of individuals and the business sector to various financial services at appropriate costs is a long-term strategy that requires the employment of many tools, mechanisms and technologies (Dev, 2006: 4313) that guarantees users to save, transfer or borrow money in a way that helps improve the possibility of Earning income (Gatnar, 2013: 22), managing financial risks (Al-Shammari, 294: 2016), accumulating savings and increasing necessary spending (Arab Monetary Fund, 5: 2012), and regular use of financial services, by employing the infrastructure for payments and cash flows (Fuller and Mellor, 2008:1506) and providing timely and sufficient credit to encourage development and increase efficiency (Alnabulsi & Salameh, 2021:229), diversifying banking assets, attracting new customers, achieving stability in deposits and reducing liquidity risks, in addition to providing a huge database for banks in a way that benefits In analyzing and excavating them in a way that affects the possibility of launching new products that meet the needs of those segments and building models for credit evaluation (Khalil, 2016: 33). Dimensions of financial inclusion:

2.2.1 Access to financial services: It refers to the ability to use financial services from official institutions. Determining levels of access requires identifying and analyzing potential obstacles to opening and using a bank account.

2.2.2 Use of financial services: the extent to which customers use the financial services provided, and requires collecting data about the regularity and frequency of use over a certain period of time (Hameeda, 2014:188).

2.2.3 Quality of financial services: There are many factors that affect the quality and quality of financial services, such as the cost of services, consumer awareness, consumer protection services, financial competencies, transparency of competition in the market, in addition to intangible factors such as consumer confidence. (Kalumeze, 2015:13).

2.3.Customer behavior (saving and borrowing): The processes of saving and borrowing are simultaneous in the banking sector, but economists see that the process of saving outside the banking system and avoiding borrowing as a financing alternative harm the growth of the economy, while financial specialists emphasize saving regardless of its method, as well to reduce consumer borrowing. Saving is defined as that part of the revenue that is deferred to be spent in real time for the purpose of accumulating it and spending it at a later time (Prinsloo, 2000:520), and the size of the savings depends on the available income, and consumption / saving is a function of the ratio of the current income to the past (Faridi & Bashir, 2010:19), As for borrowing consolidation of capital or the transfer of responsibility from one to another (Sevim & Sayılır, 2012:572), and borrowing behavior represents procedures through which money is borrowed with the expectation of repayment at a later time, so it includes creditor selection activities, loan size and repayment terms and the cost of the loan. (Mahdzan & Shaari, 2022:123) Borrowing behavior should not lead to great pressures on the standard of living of individuals, as the effect of excessive borrowing can apply not only to the individual, but also to the economy as a whole, due to the increased possibility of default (Stockhammer & Wildauer, 2018:59).

3. Methodology

3.1.Research method and tools

According to the nature of the research variables, used questionnaire as a tool for data collection (Appendix1), which was divided into three axes that included 34 phrases measured by the five-point (Licard scale), in (Trade Bank of Iraq, the Union Bank and the Ashur Bank) were selected as a research community, and accordingly 200 questionnaires were randomly distributed to a sample of customers Banks, total number of accepted questionnaires was 170, and the data was analyzed descriptively by calculating the averages, deviations, and variance of the research sample answers, and then testing the effect relationship according to the research hypotheses. According to the research variables and their dimensions, the following main hypotheses can be identified:

H0-1: There is a statistically significant effect of the financial inclusion variable on the savings and borrowing behavior of the customer

H0-2: There is a statistically significant effect of the financial inclusion variable on financial literacy

H0-3: There is a statistically significant effect of financial literacy on the savings and credit behavior of the customer, in the presence of financial inclusion as a control variable.

H0-4: Financial inclusion is a statistically significant relationship between the effect of financial literacy and the customer's savings and borrowing behavior.

3.2. Descriptive statistics

In this aspect, the responses of the sample will be analyzed using a set of statistical tools represented by central tendency tools (arithmetic mean) and measures of dispersion (standard deviation). It indicates a good agreement for the research sample, and it was recorded after the use of financial services at the highest mean of (3.67) and with a standard deviation of (0.631). The financial literacy variable recorded a total arithmetic mean of (3.45) and a total standard deviation of (0.731), which indicates a good agreement for the research sample. Saving money contributes to a decrease in my purchasing power (the highest average (3.74) with a standard deviation (1.031). Set aside on a regular basis for the future.)) The highest mean (4) with a standard deviation (0.744). The financial inclusion variable recorded a total arithmetic mean of (3.36) and a total standard deviation of (0.661), which indicates a good agreement for the research sample, and the phrase ((I face Difficulties in managing my debts)) The highest mean (3.62) with a standard deviation (1.266).

3.3. Hypothesis testing

The simple regression equation was used in testing the first and second hypotheses, and in testing the third hypothesis, the multiple regression equation was adopted, so that its equation becomes as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 g_1 + \beta_5 g_2 + \beta_6 g_3$$

Y = customer behavior, X_1 = financial knowledge, X_2 = financial attitude, X_3 = financial behavior,

g_1 = access to services, g_2 = use services, g_3 = quality of services

H0-1: There is a statistically significant effect of the inclusion of change on the savings and borrowing behavior of the customer

The first main hypothesis includes two hypotheses:

H0-1-1: There is a statistically significant effect of the financial inclusion variable on the savings behavior of the customer, Financial inclusion the effected in the savings behavior of the customer by ($\beta = 0.725$), which means that the change in financial inclusion by one degree leads to a change in the savings behavior by β , while the value of ($R^2 = 0.525$) which is the other that confirms the alternative hypothesis, and we point out that the quality of financial services dimension is the strongest in influence and explanation from the rest of the dimensions of financial inclusion with a value of ($\beta = 0.742$), followed by the use of financial services with ($\beta = 0.632$), then the dimension of access to financial services with a value of ($\beta = 0.420$). The banker in ensuring the achievement of smooth and easy access to the services provided by the bank will reflect positively on the confidence of individuals in the banking system and motivate him to place his personal savings in banks. As a result, it will increase the volume of deposits with banks and contribute significantly to ensuring the provision of facilities and credit to those who wish, and this is evident from the results of the test The hypothesis is also the need for

banks to pay attention to the nature and quality of service in the first place, and then to think about how to use it and the ease of access to it.

H0-1-2: There is a statistically significant effect of the financial inclusion variable on the borrowing behavior of the customer, was ($F = 77.692$) which is higher than the tabular one at significant ($P = 0.00$), which means negating the null hypothesis and confirms the alternative hypothesis that there is an effect of financial inclusion in the borrowing behavior variable, so the variation in the customer's borrowing behavior It is explained by financial inclusion by ($R^2 = 0.509$), and the value was ($\beta = 0.713$). means a change in financial inclusion by one degree leads to a change in credit behavior by an amount of β , which also confirms the negation of the null hypothesis, and we point out that the service quality dimension is the strongest influence and explanation of The rest of the dimensions of financial inclusion in the customer's credit behavior with a value of ($\beta = 0.775$), followed by the use of financial services with a value of ($\beta = 0.602$), followed by the dimension of access to financial services with a value of ($\beta = 0.532$). The results of this hypothesis are consistent with the previous one, with a positive effect of removing inclusion in the individuals' intentions to obtain credit facilities and loans, but it is clear that the strength of the influence of the financial inclusion variable is higher in savings behavior than in borrowing, which may explain the nature of the sample since most of the individuals are young Savers or those working in the government sector prefer saving over borrowing. On the other hand, banks operating in the Iraqi market place many restrictions on the process of granting credit to individuals.

H0-2: There is a statistically significant effect of the financial inclusion variable on financial literacy

The value of ($F = 89.071$) was higher than the tabular one at ($P = 0.000$), which denies the null hypothesis and confirms the alternative hypothesis.) means that the change in financial inclusion by one degree leads to a change in financial literacy by an amount of β , at a significant degree (0.000), which is the other one that confirms the alternative hypothesis, and we point out that the dimension of financial knowledge is the strongest influence and explanation of the rest of the dimensions of financial inclusion with a value ($\beta = 0.728$), then the financial behavior with a value of ($\beta = 0.683$), then the financial attitude with a value of ($\beta = 0.446$). It is clearly evident that the efforts made in financial inclusion, regardless of the party that practices it in Iraq, is reflected positively and significantly on financial literacy, so the banks expanded the form and spread of the services they provide to individuals and the ease of access to them will raise their level of knowledge and increase their interest in what It can provide them with opportunities to achieve new entrances, and introducing individuals to these facts will inevitably contribute to enhancing the feeling of saving and borrowing.

H0-3: There is a statistically significant effect of financial literacy on the savings and credit behavior of the customer, in the presence of financial inclusion as a control variable.

H0-3-1: There is an effect of the financial literacy variable on the customer's savings behavior in the presence of financial inclusion as a control variable. The value of ($F = 122.706$) was higher than the tabular one at ($P = 0.000$), which confirms the negation of the first sub-null hypothesis and confirms Alternative hypothesis, the case of the variation in the customer's savings behavior is explained by the literacy variable by ($R^2 = 0.621$), while the value of ($\beta = 0.788$) means that the change in literacy by one degree leads to a change in the

savings behavior by β , which is the other one that confirms The alternative hypothesis, and we point out that the dimension of financial knowledge is the strongest in influence and explanation from the rest of the dimensions of financial inclusion with a value of ($\beta = 0.737$), then it is followed by the financial position with ($\beta = 0.573$) and then financial behavior with a value of ($\beta = 0.556$). It is clearly evident that the efforts made to eradicate financial illiteracy, regardless of the party that practices it in Iraq, is positively and significantly reflected on the savings behavior of individuals, raising the level of their financial knowledge and how to properly direct their spending process away from excessive consumer purchases, especially for luxury or related products. By self-realization, individuals who tend to save are more resistant to financial crises at the level of the economy or at the personal level, and introducing individuals to these facts will contribute to enhancing the feeling of saving. Raising the level of financial knowledge among individuals in how to manage their revenues and build their own budgets, as well as directing their savings in the financial banking system as a way to invest is the most powerful effect of the rest of the dimensions of financial literacy in enhancing savings behaviour. As for the second sub-hypothesis:

H0-3-2: There is an effect of the financial literacy variable In the credit behavior of the customer in the presence of financial inclusion as a control variable, the value of ($F = 8.073$), which is less than the tabular one, at ($P = 0.00$), which means the negation of the null hypothesis and confirms the alternative hypothesis that there is an effect of financial literacy on the credit behavior variable, but in the opposite direction. The variation in the credit behavior of the customer is explained by literacy by ($R^2 = 0.09$), and the value was ($\beta = -0.040$). A change in literacy by one degree leads to a change in credit behavior by β , which also confirms the negation of the null hypothesis, and we point out that The dimension of financial knowledge is also the strongest in influence and explanation from the rest of the dimensions of financial inclusion with a value of ($\beta = 0.009$), then it is followed by the financial attitude with ($\beta = 0.087$) and then financial behavior with a value of ($\beta = 0.002$). It is clear that the effect of the financial literacy variable is positive in saving behavior, but negative in the borrowing variable to a small extent. Increasing the awareness of individuals in an attempt to exploit opportunities and raise the standard of living through the establishment of investment projects or the purchase of housing units, etc., it is clear that literacy can increase the awareness of individuals towards the process Obtaining loans and how to manage their personal budgets. The Iraqi banking system's attempt to enhance the standard of living and improve consumption behavior was a motive in expanding the process of granting credit.

H0-4: Financial inclusion is a statistically significant relationship between the effect of financial literacy and the customer's savings and borrowing behavior.

Record of financial inclusion on the relationship The effect of literacy on the customer's savings behavior has a value of ($F = 155.140$) and on credit behavior a value of ($F = 189.33$), which is higher than the tabular at ($P = 0.000$), which denies the null hypothesis and confirms the alternative hypothesis that there is a positive effect of financial inclusion In enhancing the relationship, the effect of the literacy variable on the saving and credit behavior of the customer, and the value of ($R^2 = 0.627$) for the effect of saving behavior was ($R^2 = 0.707$) on the credit behavior, while the value of beta was for the inclusion variable ($\beta = 0.165$) and for the literacy variable ($\beta = 0.649$) when the dependent variable is saving behavior, and its value becomes (β

= 0.076) for inclusion and ($\beta = 0.019$) for the literacy variable when the dependent variable is borrowing behavior, and its values as a result also confirm the alternative hypothesis. It is clear from the foregoing that the effort of financial inclusion must be in harmony with efforts to eradicate financial illiteracy and raise the level of knowledge of individuals, due to its significant positive impact on customer behavior, whether saving or borrowing. Providing easy access to banking products of good quality is not sufficient in light of the absence of financial knowledge among individuals in Manage their revenues, direct their consumer purchase methods, and set future plans to raise the standard of living, retirement plans, or purchase a housing unit, and others.

4. Conclusions

The research aims to test the impact relationship of the efforts exerted in raising knowledge and financial literacy in the behavior of customers with the presence of the mediating variable of financial inclusion, and by using a questionnaire form as a tool for data collection, and after analyzing it descriptively and hypothetically, the researcher concluded that.

4.1. There is a statistically significant positive effect of the financial inclusion variable on the customer's savings and borrowing behavior, which is greater on the savings behavior, and the financial knowledge dimension and the quality of services have the strongest effect.

4.2. There is a statistically significant positive effect of the financial literacy variable on the customer's savings behavior and a statistically significant negative effect on the borrowing customer's behavior, and the financial literacy dimension and the quality of services are the strongest influence.

4.3. The effect of positive financial literacy as an explanatory variable on the customer's savings and borrowing behavior increases with the entry of financial inclusion as a mediating variable, which reinforces the need to pay attention to them in a harmonious manner.

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Appendix (1) Questionnaire

a. Financial literacy variable

The first dimension: financial knowledge

1. I believe in the principle of justice without equality in financial matters
2. My savings contribute to a decrease in my purchasing power
3. When depositing an amount of one million dinars at a rate of 10%, then my profits after a year will be 100 dinars
4. I do not see the need for the existence of the Iraq Stock Exchange

The second dimension: the financial position

5. I tend to buy commodities regardless of their monthly revenue
6. I believe in the rule: money is there to be spent
7. I see that today's returns are not linked to future returns
8. I am ambitious to make a profit, but not at the expense of satisfying my needs.

The third dimension: financial behavior

9. Think carefully before buying something, can I afford it
10. Pay off my debts in due time
11. I constantly review my personal budget
12. He has long-term financial goals

(Ali, 2022: 144)

B. financial inclusion variable

The first dimension: Access to financial services

13. There are sufficient branches of the bank to allow access to financial services
14. There are enough automated teller machines for the bank to allow access to the service
15. The behavior and treatment of employees at the bank is good
16. Communication via electronic correspondence is easy
17. The bank's website is easy to browse

The second dimension: the use of financial services:

18. Your educational level affects the use of banking services
19. Bank charges hinder your use of the Services
20. Official documents affect the use of banking services

The third dimension: the quality of financial services:

21. The services provided are good
22. I feel confident about my financial statements and information
23. I feel satisfied with the performance of the bank, its employees and the services provided
24. The average time a client spends looking at me is considered to be long. (**Botbeena, 2018: 22**)

c. Saving behavior variable

25. I put money aside on a regular basis for the future.
26. In order to save, I often consider whether it is a real necessity before making a purchase.
27. In order to save, I always follow the monthly budget.
28. In order to save, I plan to reduce my expenses.
29. I save for certain goals. (Thung et al., 2012:78)

d. Borrowing behavior variable

30. Borrow the highest amounts, regardless of the repayment mechanism
31. I will use credit if it has attractive features even if I don't need credit.
32. I am having difficulties managing my debts
33. I finance the hole in my budget with consumer loans.

I prefer using consumer credit over cash when I buy a durable good (**Sevim & Sayılr, 2012:577**) .34